

REMARKS/ARGUMENTS

For convenience, the following headings are the same as those provided in the Office Action, and for the sake of continuity, Applicants will address each item raised by the Examiner in the order presented in the Office Action under its appropriate heading.

The undersigned would like to thank Examiner Ortiz and Supervisory Patent Examiner Rimmel for their valuable assistance in formulating this response. The Examiner Interview conducted by telephone on January 26, 2005, was most helpful in determining the Examiner's concerns with respect to certain claim language, and in the preparation of the amendments proposed herein.

Drawings

Applicant is submitting herewith proposed drawing corrections in reply to the Office action.

The drawings were objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: in figure 2, reference characters "32", "42" and in figure 2F, reference character "254", and figure 5F are not described in the written description. Substitute paragraphs 64 and 113 have been amended to include references to the character 32 (par. 64) and to Fig. 5F (par. 113); proposed replacement Fig. 2 has been revised to delete reference to character 42; and proposed replacement Fig. 2F has been revised to delete reference character 254.

The drawings were also objected to as failing to comply with 3 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the drawings: character "510", in page 23, paragraph 105 is not shown on the drawings. Proposed replacement drawing 5A has been amended to add the missing reference character 510.

Support for the proposed amendments to the drawings and specification may be found in the original application as follows: character “32” and Fig. 5 were indicated on the Figs. 2 and 5F, respectively, but omitted from the detailed description; and character 510 was included in the description, but omitted from Fig. 5F.

Applicant has noted additional typographical errors in the specification and would like to take this opportunity to correct them. In Paragraph 139, the word “data” was misspelled as “date”; and in Paragraph 155, the words “numbers or letters” was omitted in the original specification. Support for this correction is found in Figs. 9 & 10, showing addressing that includes numbers and letters. Applicant respectfully submits that the proposed amendments to the drawings and to the specification do not include any new matter.

Claim Rejections Under 35 U.S.C. §102(e)

Paragraph 5 of the Office Action rejects claim 23 under 35 U.S.C. 102(e) as being anticipated by Florance, et al. (U.S Publication No. 2003/0229592). In paragraph 6 of the Office Action, claim 32 stands rejected under 35 U.S.C. 102(e) as being anticipated by Brady (U.S Patent No. 6,633,875).

In response, in order to remove issues from this case, Applicant has requested cancellation of claims 23, 24, and 32-38.

Claim Rejections under 35 U.S.C. §103

In paragraph 8 of the Office Action, claims 1-6, 17-22, and 33-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brady (U.S. Patent No. 6,633,875) in view of Florance, et al. (U.S. Publication No. 2003/0229592). In paragraph 9 of the Office Action, claims 7-16 and 30-31 stand rejected as being unpatentable over Brady in view of Florance, et al., as applied to claims 1-6, 17-22, 24-29, and 33-53 above, and further in view of Orbanes, et al. (U.S. Publication No. 2002/0109680) In paragraph 10 of the Office Action,

claims 24-29 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Florance, et al. in view of Brady.

In response, Applicant notes that during the aforementioned Examiner Interview conducted on January 26, 2005, the Examiner and her supervisor expressed concern over the use of the term “semantic hierarchy” in the independent claims, as the word “semantic” could be broadly construed to cover a mere listing of data, and would not limit the claims to a hierarchical data structure as Applicant describes in the specification. Also, the Examiner and supervisor indicated that the use of the term “associated with” the next highest level attribute, was not sufficiently specific to describe the hierarchical relationship between the level attributes.

As indicated in the specification, Applicant’s invention relates to a computer-implemented real estate database having a single, hierarchically-defined table in which the data is stored and accessed. The specification refers to the hierarchical data structure in terms of levels (first, second, and third level attributes), as another way of describing a parent-child relationship linking upper- and lower-level data elements in a table. Thus, the first-level record, in this case property, serves as the parent of the second-level record, which is a structure; the second level record structure, serves as the parent of the third-level record, a room, and so on. By adhering to the data structure in the first, second, and third level hierarchy, the data may be systematically entered into a cumulative database that is remotely accessible for uploading and for downloading of data.

Applicant respectfully disagrees with the Examiner’s reasons for rejecting claims 2, 5, 23, 24, 32-38, 40, 45, 47, and 51-52. However, in order to remove issues from the case, Applicant requests cancellation of those claims. Applicant has either incorporated the limitations of the cancelled claims into the independent claims, or, in the case of claims 23, 24, and 32-38, eliminated claims directed to methods that were not limited to the real estate database of the present invention.

With respect to those claims still remaining in the case, Applicant has amended the base claims (1, 17, 25, 28, 39, 46, and 53), to eliminate the terms “semantic hierarchy” and “associated with,” in order to more clearly define the scope of the claimed invention as a hierarchical database

The Examiner states that Florance, et al. teaches a database management system characterized in that the entire database is in one table, and the table has sets of records relating to each entity, and the records have an address field made up of a hierarchically ordered set of identifiers. In response, Applicant respectfully traverses the rejection of claims 1-6, 17-22, and 33-53 under 35 U.S.C. 103(a) as being unpatentable over Brady in view of Florance, et al. Referring first to Florance, et al., Fig. 44 is shows a table that represents a Results list generated in response to a specific query, which table does not represent an entire database. The order and content of the table, as displayed in Fig. 44 of Florance, et al., have no particular significance. Moreover, the data included in the table displayed in Fig. 44 is not presented hierarchically, and the displayed results present limited property description options, i.e., address, city, state, price, square foot size, price per square foot, cap rate, and type of property. In paragraph 222, it is stated as follows: "The hierarchical display of information retrieved from the database can be used in other contexts in which display of too much information is confusing or impractical, and resubmitting queries to get basic information is too cumbersome for users. Thus, the present invention also provides graphical user interface tools with broad applicability." Thus, the term "hierarchical" in Florance, et al. clearly relates to displays and graphical user interfaces, and not to the organization or structure of the database.

Moreover, Florance, et al., discloses a method which employs multiple databases, referred to as "Data Sources" (see A10 in Fig. 1). Further, Florance, et al. describes the invention as follows:

The system of the present invention makes it possible for a user to extract data relating to virtually every aspect of a commercial real estate transaction. Although the data is described as being contained within a "database", data can be stored in a plurality of linked physical locations or data sources. The significant aspect is that the database contains information relating to areas that have previously been only accessible in isolation from one another. By providing a unified data model and a system for forming a variety of queries against the unified database, it is possible to understand with precision the relationship between market factors that have heretofore only been understood in an anecdotal way...Prior to the system of the present invention, however, there has been no unified way of storing an investor's investment criteria and continually monitoring the market so as to have the ability to provide a real-time alert when a property matching the investor's investment criteria has become

available. This advantage is achieved because databases containing leasing information are linked with databases concerning buildings for sale, which are linked to databases that store a particular investor's investment criteria, which are linked to databases that store the data necessary to determine market conditions, and so on. It is through the connections of previously discrete databases that the synergies and advantages of the present invention arise. (Florance, et al., Par. 233).

Clearly, Florance, et al., while using the term "database" in the singular, describes a system wherein the "core data warehouse" is a plurality of linked tables, which by their disparate nature requires them to be structured relationally, as opposed to hierarchically. There is no suggestion in Florance, et al. that the entire database be comprised of a single table.

The Examiner states that Brady teaches a computer-implemented data management method for managing information relating to entities, comprising, providing on a computer system, at least one table for a plurality of records, each of the plurality of records having an address field and a descriptor; and controlling the entry of new records in the table so that the address fields for all of the plurality of records define a semantic hierarchy among the plurality of records in the table. The Examiner cites the Abstract; Figs. 4, 8, and 12; Column 1, Lines 9-16; Column 9, Lines 33-35; Column 10, Lines 36-39; Column 12, Lines 9-34; and Column 15, Lines 13-15, in support of this rejection.

In response, Fig. 4 in Brady simply shows a Graphic User Interface (GUI), for entering property information in formulating a user query, for selecting a subset of the listed properties. Fig. 8 is a table showing the description of data elements stored in the system database. The list of data elements includes control file information, loan dynamic information, loan adjustable rate, loan prepayment information, and other loan dynamic information as detailed in Fig. 11. Fig. 8 is, in fact, one of many tables that comprise the system disclosed in Brady. Such a plurality of data tables again teaches away from the method of the present invention, which employs a single-table database. Fig. 8 is also an example of a relational database, not a hierarchical database. There is no addressing scheme set forth for data elements, and nothing suggesting that the data elements be addressed in a hierarchical scheme.

Brady (Figs. 12 and 13) sets forth Property Static Information from the Data Elements table in Fig. 8. These tables display simply a catalogue of various data fields, none of which are semantically related to the next level above (or at least that are not broken down into a next lower level. This type of table does not permit the addition of further subdivisions. It is clear from the Figs. 12-14, and their descriptions, that this is a single table containing property static information for one data element. The table does not comprise the entire database.

Further, it is clear from the description in Brady in Column 10, Lines 20-39, that the data elements are not hierarchically structured. Brady indicates that where there are substantial changes to the basic character of an existing asset, the existing asset is terminated in the database, and a corresponding new asset is created in the database, incorporating the new features of the asset. Brady, therefore, does not enjoy the advantages of the hierarchically structured database of the present invention. The example set forth in Brady, which presumes the static nature of data elements, such as number of residential buildings on a property, would be easily modifiable in a hierarchical table of the present invention. Support for such an addressing scheme to allow a modification is found in the specification in Fig. 6, and paragraphs 136, 137, and 143-153 of Applicant's original application.

Brady, Column 1, lines 9-16, simply recites the field of the invention in general terms, as a method of collecting, processing, and reporting information from data providers of real estate information over a computer driven network. This general statement does not disclose anything other than a global concept of a real estate network, and lacks any reference to the hierarchical features and structure of the central database comprising a single table. Brady Column 9, Lines 33-35 refers to setting a hierarchy for determining the owner of data. This excerpt does not disclose a hierarchical addressing scheme for the data. Rather, it prioritizes access rights for modifying the data, and identifying them, hence the word "hierarchy" in the context used by Brady is not relevant to the structure of the data table. Brady Column 12, Lines 9-34, again, simply sets forth the hierarchy associated with data providers, and their proximity, or "closeness," to the data for data entry and data access privileges. This is the same comment as above, and does not relate to hierarchical database structure. It seems the Examiner is confusing the use of the words hierarchy and hierarchical in two different contexts. Finally, the last paragraph cited by the Examiner, Brady Column 15, lines 13-15,

states that when updating data, a batch file must be updated. This has to do with a procedure requiring updating the copying.bat file manually before a new provider is authorized to write data to submission files. This relates primarily to initializing the application to recognize new providers, which must be done in any data access application.

With respect to Orbanes, et al., claims 7-16 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brady in view of Florance, et al. (U.S. Publication No. 2003/0229592) as applied to claims 1-6, 17-22, 24-29, and 33-53 above, and further in view of Orbanes, et al.

Orbanes, et al. discloses a method of viewing information in virtual space, including automatically converting files into a W3C format, such as XML, and then into a virtual space language format, such as ZML or SZML. An extractor module converts the content (any content) into a hierarchical relationship that may follow a common language standard, e.g., XML- using a traversal algorithm to map the contents hierarchically. (See Orbanes, et al. Paragraph 113). This is merely a step in the process of automatically converting the content into the ZML format for 3-dimensional viewing. There is no suggestion here of using the XML in a hierarchical addressing scheme following the format of P-S-R. It would not be obvious to combine a hierarchical table defined by a property, structure, and room structure, as set forth in the present invention, with an automatic method of mapping a data source into a ZML format, through an XML or other W3C standard language conversion. (See Orbanes, et al. Paragraphs 99 – 101)

Applicant respectfully asserts that in light of the above claim amendments, this rejection of claims 1-53 is rendered moot. However, Applicants add that if the Examiner disagrees, Applicants further urge that Brady, Florance, et al., and Orbanes, et al. are not properly combinable to provide the basis for an obviousness argument. One simply cannot pick portions of a reference to provide a rejection. There must be some motivation in the art for the combination.

As stated by the C.A.F.C. in In re Laskowski, 10 USPQ 2d (BNA) 1397 (C.A.F.C. 1989):

[t]he prior art does not suggest Laskowski's modification of the Hoffman band saw wheel, or provide any reason or motivation to make that modification. In re Regel, 526 F.2d 1399, 1403 n.6, 188 USPQ 136, 139 n.6 (CCPA 1975) ("there must be some logical reason apparent from positive, concrete evidence of record which justifies a combination of primary and secondary references") (citing In re Stemniski, 444 F.2d 581, [*1399] 170 USPQ 343 (CCPA 1971)). We agree with the Commissioner that the suggestion to modify the Hoffman structure need not be found in Hoffman. In this case, however, the only source of the suggestion is Laskowski; there is no prior art teaching that would provide the motivation of using a loosely fitting tire, rising above the pulley flanges, to support the saw blade. See In re Geiger, 815 F.2d 686, 688, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987)(obviousness cannot be established by combining pieces or prior art absent some "teaching, suggestion, or incentive supporting the combination"); In re Cho, 813 F.2d 378, 382, 1 USPQ2d 1662, 1664 (Fed. Cir. 1987)(discussing the Board's holding that "the artisan would have been motivated" to combine the references); In re Deminski, 796 F.2d 436, 443, 230 USPQ 313, 316 (Fed. Cir. 1986)(impropriety of hindsight reconstruction); In re Donohue, 766 F.2d 531, 534, 226 USPQ 619, 622 (Fed. Cir. 1985)(referring to the "suggestion or motivation to combine teachings" in rejections for obviousness)(citing In re Samour, 571 F.2d 559, 563, 197 USPQ 1, 4-5 (CCPA 1978)); In re Clinton 527 F.2d 1226, 1228, 188 USPQ 365 367 (CCPA 1976)(holding that "a person of ordinary skill in the art would have had sufficient motivation to combine" the separate steps); In re Boe, 505 F.2d 1297, 1299, 184 USPQ 38, 40 (CCPA 1974)(discussing "[t]he main motivation for combining" two prior art references).

See also In re Newell, 13 USPQ 21 (BNA) 1248 (C.A.F.C. 1989).

CONCLUSION

In light of the foregoing remarks, Applicant respectfully requests that the Examiner amend the specification as indicated.

Respectfully submitted,

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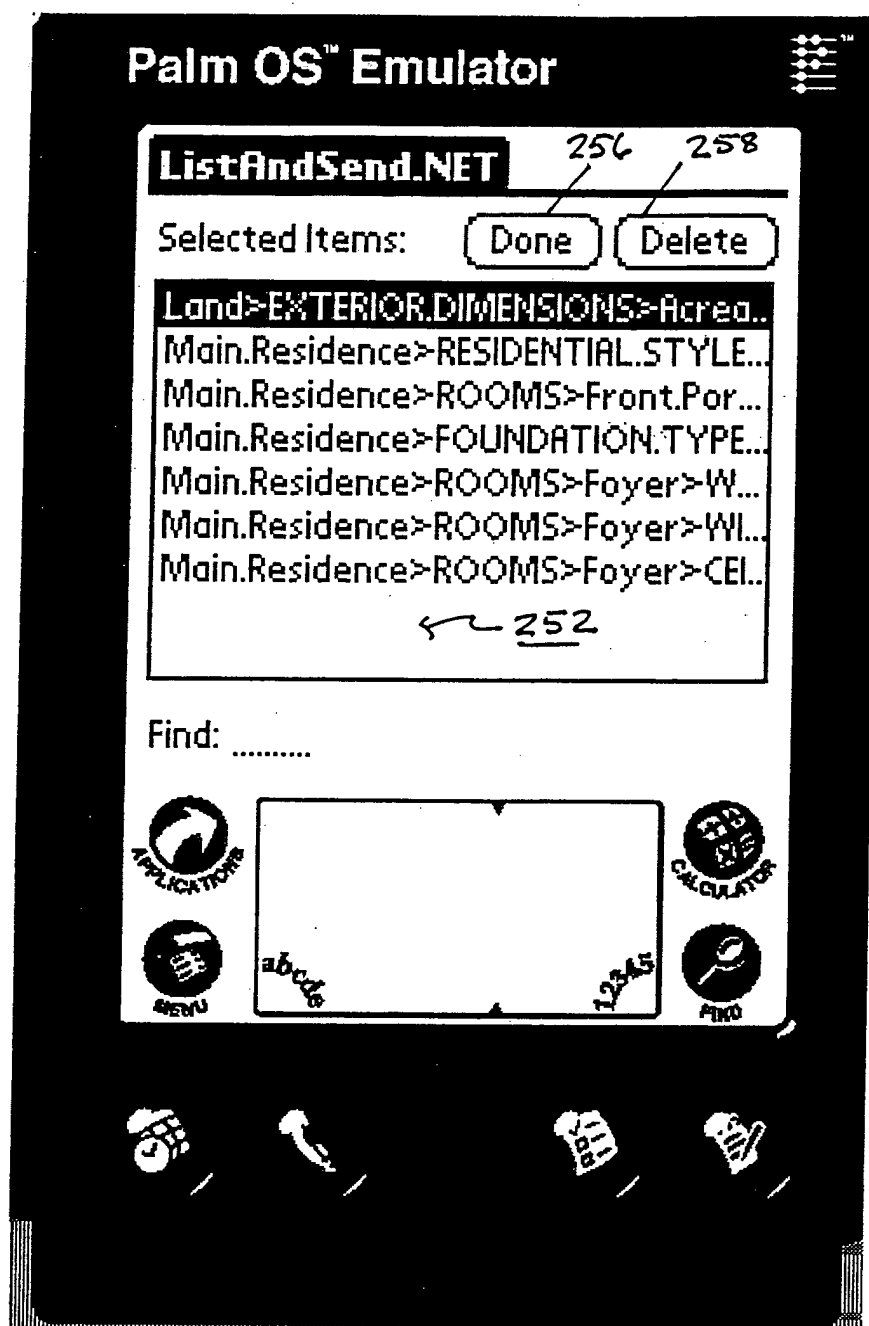
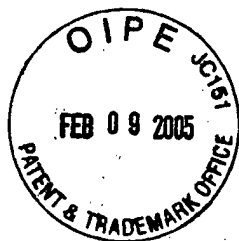
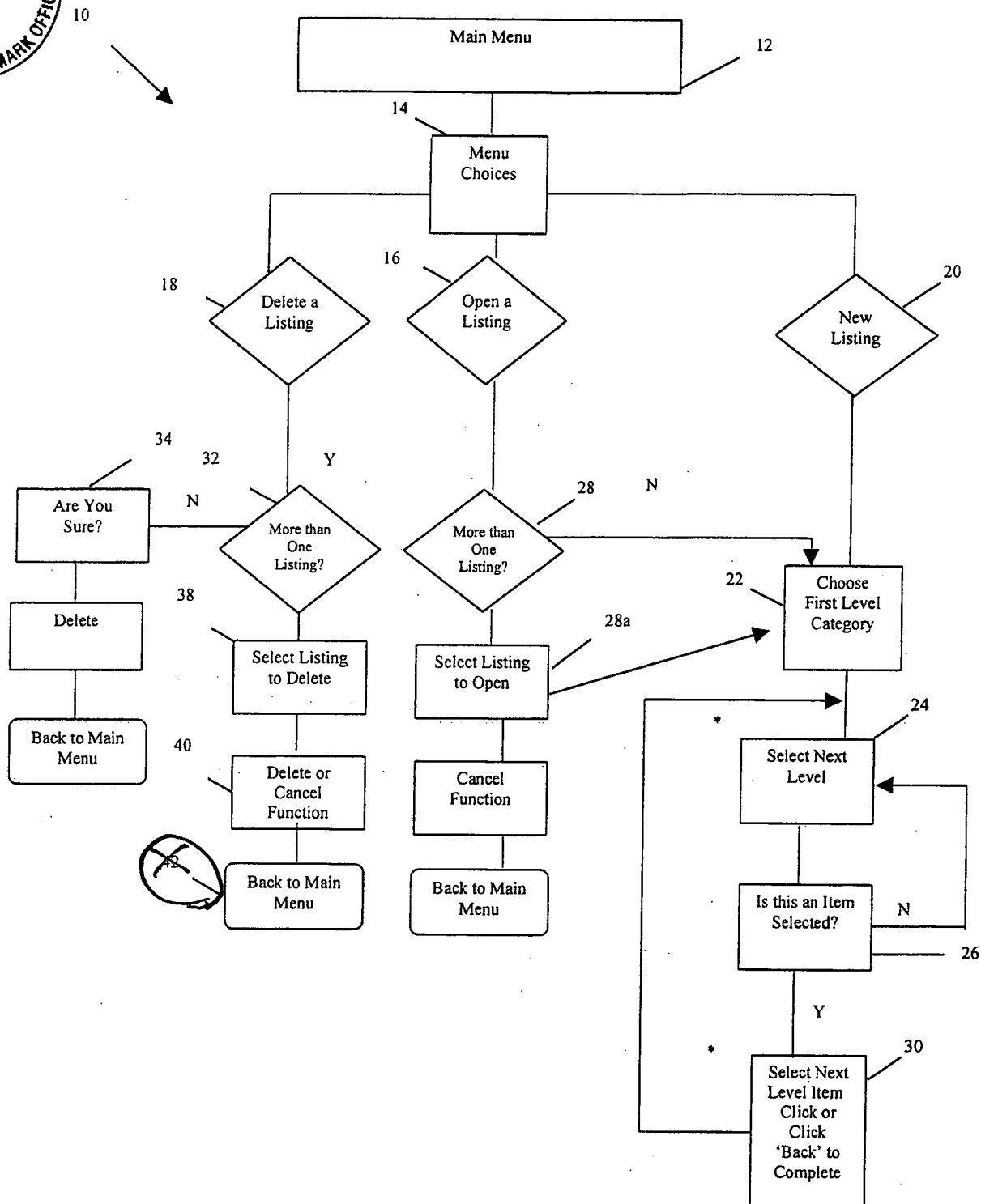
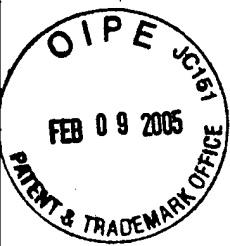


FIG. 2F
ANNOTATED MARKED UP DRAWING



*User's can find items
from the list and return
to the main menu via
link in upper corner

FIG. 2
ANNOTATED MARKEDUP DRAWING

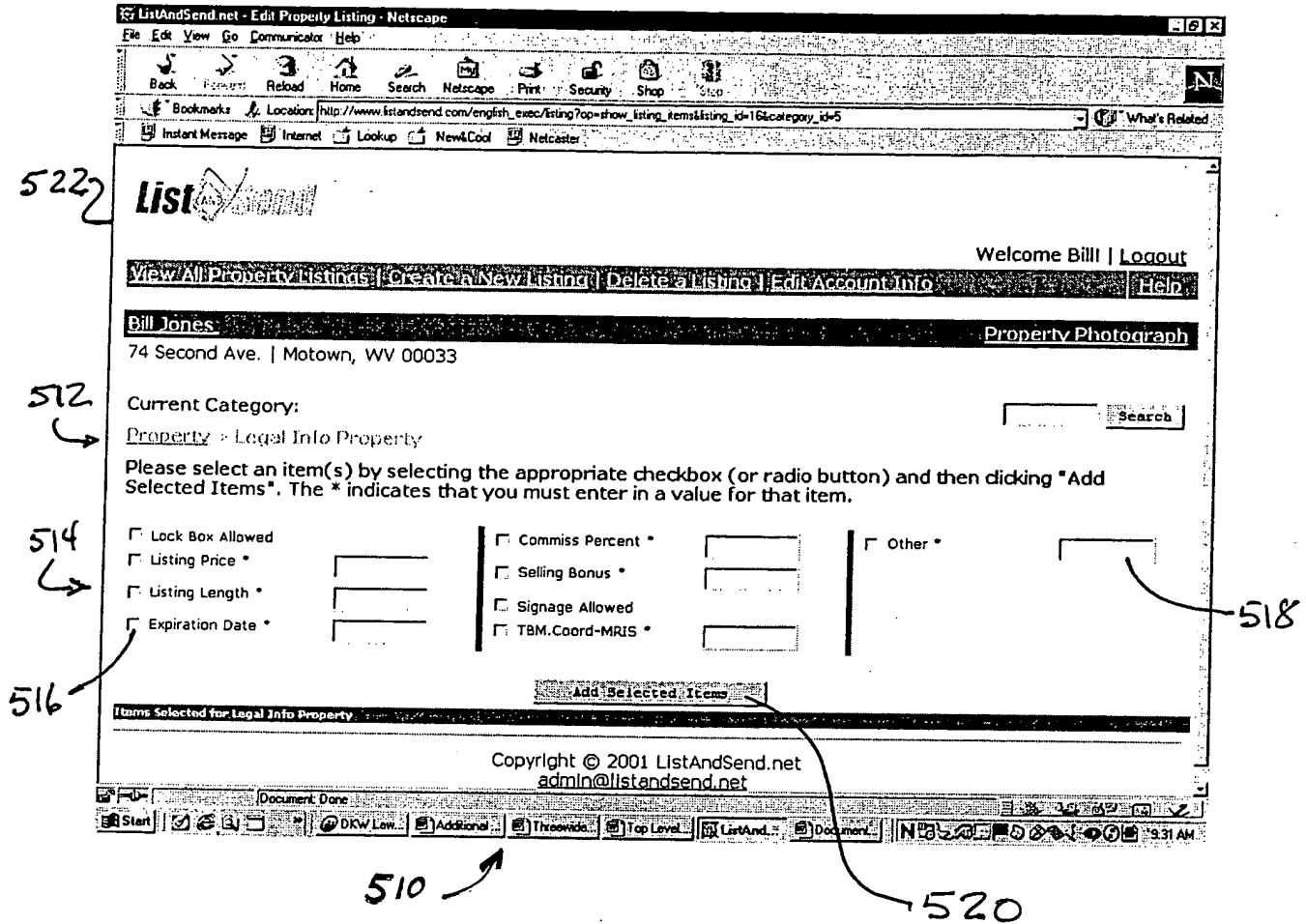
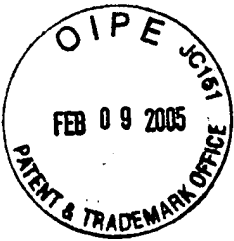


FIG. 5A

ANNOTATED MARKED UP DRAWING